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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,161	04/16/2007	Evripides Drakos	1487.0680000	6955

26111 7590 03/12/2009

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EXAMINER	
YOUSSEF, ADEL Y	
ART UNIT	**PAPER NUMBER**
2618	
MAIL DATE	**DELIVERY MODE**
03/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,161	DRAKOS, EVRIPIDES	
	Examiner	Art Unit	
	ADEL YOUSSEF	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-8 and 10-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the arguments filed on 11/25/2008. This action is made **FINAL.**

Response to Arguments

2. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5, 7, 9, 11, 12, 16-21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacomb-Hood et al (PGUB -No: 2003/0052819) in view of Kasser et al. (Patent No: 6078800).

With respect to claim 1, Jacomb-Hood et al. disclose a method of configuring a multi-beam (#100A) satellite to enable remote monitoring ("remote user") of its transmissions (by teaching in paragraph 37, that remote receive stations, to a means for dividing each signal into a plurality of fractional signals), wherein the satellite transmits a signal in a first beam (#114A) to a user terminal for receiving the signal (by teaching in paragraph 46, see figure 1B, that Interference

signal 128B is received through the sidelobe of beam 114B), except for the method comprising configuring the satellite to transmit a copy of the signal in a second beam selected to contain a remote monitoring station for monitoring the copy wherein the copy is transmitted in the second beam in a channel different from that used for user data transmission to user terminals in the second beam.

However Kasser teach the method comprising configuring the satellite to transmit a copy of the signal ("delayed duplicate signal") in a second beam (V2) selected to contain a remote monitoring station for monitoring the copy wherein the copy (by teaching in column 2, lines 40-46, that reads on duplicate signal) is transmitted in the second beam (V2) in a channel different from that used for user data transmission (column 3, lines 63-66, that received interfering signals having undergone different channel distortions)to user terminals in the second beam (V2) (by teaching in column 4, lines 15-20) Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to modify the apparatus of Jacomb-Hood et al to include copy of the signal as taught by Kasser in order to control signals thereby reducing RF interference exploiting the fact of the simultaneous presence of the same signal, as taught by Kasser in column 1, lines 53-57.

Regarding Claim 2, Jacomb-Hood further teach et al. teach the method of claim 1, wherein the copy is transmitted at substantially lower gain than the signal (paragraph 42).

Regarding Claim 3, Jacomb-Hood further teach a method of configuring a multi-beam (#100A) satellite to enable remote ("remote") monitoring of its transmissions (by teaching in paragraph

37, that remote receive stations, to a means for dividing each signal into a plurality of fractional signals), wherein the satellite transmits a signal in a first beam (#114A) , except for the method comprising configuring the satellite to transmit a copy of the signal in a second beam (paragraph 59, figure 8) at a substantially lower gain than the transmission of the signal .Kasser teach the method comprising configuring the satellite to transmit a copy of the signal in a second beam (V2) at a substantially lower gain than the transmission of the signal (by teaching in column 2, lines 40-46, that reads on duplicate signal).Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to modify the apparatus of Jacomb-Hood et al to include copy of the signal as taught by Kasser in reducing RF interference exploiting the fact of the simultaneous presence of the same signal, as taught by Kasser in column 1, lines 53-57.

Regarding Claim 4, Kasser et al further teach the method of claim 3, wherein the signal and the copy are transmitted at substantially the same frequency (column 1, lines 36-40).

Regarding Claim 5, Kasser et al further teach The method of claim 1, wherein the signal is transmitted at a first frequency and the copy is transmitted at a second frequency different from the first frequency (column 3, lines 52-59).

Regarding Claim 7, Kasser et al further teach the method of claim 1, wherein a copy of the signal (reads on "duplicate signal") is transmitted in a plurality of different beams, including said second beam (V2) (by teaching in column 4, lines 15-20).

Regarding Claim 9, kasser et al further teach the method of claim 1, wherein the satellite is periodically reconfigured so as to transmit a copy of a different said signal(reads on "duplicate signal") in said second beam (v2) (by teaching in column 2, lines 40-46).

Regarding Claim 11, Jacomb-Hood further teach the method of claim 1, wherein the signal contains user data addressed to the user terminal (by teaching in paragraph 14).

Regarding Claim 12, Jacomb-Hood et al further teach the method of claim 1, wherein the step of configuring comprises transmitting a configuration command directly or indirectly to the satellite (by teaching in paragraph 60).

Regarding Claim 16, Kasser et al further teach a method of monitoring a transmission of a signal by a multi-beam satellite in a first beam, the method comprising receiving a copy of the signal in a second beam of the satellite and monitoring the copy of the signal (by teaching in column 2, lines 40-46, that reads on duplicate signal), wherein the copy is received in the second beam in a channel different from that used for user data transmission to user terminals in the second beam(column 3, lines 63-66, that received interfering signals having undergone different channel distortions).

Regarding Claim 17, Kasser et al further teach the method of claim 16, wherein the copy of the signal ("duplicate signal") is received at a different frequency from that of the signal (column 4, lines 33-40).

Regarding Claim 18, Kasser et al further teach the method of claim 17, wherein the copy of the signal ("duplicate signal") is received in a channel reserved for monitoring (column 3, lines 61-67).

Regarding Claim 19, Kasser et al further teach the method of claim 16, wherein the copy of the signal ("duplicate signal") is received at the same frequency as that of the signal, and the second beam is non-adjacent to the first beam (column 1, lines 35-40).

Regarding Claim 20, Jacomb-Hood further teach the method of claim 16, wherein the gain of the copy is substantially lower than that of the signal (paragraph 42).

Regarding Claim 21, Jacomb-Hood further teach the method of claim 16 to 20, wherein the signal contains user data addressed to the user terminal (by teaching in paragraph 14).

Regarding Claim 23, Jacomb-Hood teach a method of monitoring a property of the earth's atmosphere, comprising configuring a multi-beam (#100A) satellite to transmit multiple copies of a predetermined signal in different beams ("two beams", (#114A), (#124)) thereof, receiving each of said copies at corresponding spatially diverse monitoring stations (by teaching in paragraph 37, that remote receive stations, to a means for dividing each signal into a plurality of fractional signals), and except for deriving said property from the received copies, wherein said multiple copies of the predetermined signal are transmitted in channels different from those used for user data transmission to user terminals in the respective beams. However kasser teach

deriving said property from the received copies, wherein said multiple copies of the predetermined signal are transmitted in channels different from those used for user data transmission to user terminals in the respective beams (by teaching in column 2, lines 40-46, that reads on "delayed duplicate signal").Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to modify the apparatus of Jacomb-Hood et al to include copy of the signal as taught by Kasser in order to control signals reducing RF interference exploiting the fact of the simultaneous presence of the same signal, as taught by Kasser in column 1, lines 53-57.

Regarding claim 27, "Cancelled"

5. Claims 6, 8, 13, 14, 15, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacomb-Hood et al (PGUB -No: 2003/0052819) and Kasser et al. (Patent No: 6078800) in view of Barrett et al. (Patent No: 6965755).

Regarding Claim 6, Jacomb-Hood et al teach the method of claim 5, wherein the copy of the signal and the copy of the further signal are transmitted in a channel reserved except for monitoring by the remote monitoring station. However Barrett teach a remote monitoring station for (column 4, lines 5-11, see figures 1, 3).Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to modify the apparatus of Sharon to include monitoring station for monitoring the copy as taught by Barrett in order to control signals thereby high quality output signal, as taught by Barrett in column 2, lines 45-50.

Regarding Claim 8, Kasser et al teach the method of claim 7, wherein the plurality of beams are selected so as each to contain except for a remote monitoring station for monitoring the copy. However Barrett teach a remote monitoring station for (column 3, lines 10-18, see figures 1-3).Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to modify the apparatus of Sharon to include monitoring station for monitoring the copy as taught by Barrett in order to control signals thereby high quality output signal, as taught by Barrett in column 2, lines 45-50, see figure 2.

Regarding Claim 13, Jacomb-Hood teach The method of claim 1, further including transmitting directly or indirectly to the remote monitoring station channel allocation data identifying an allocation of one or more user channels(paragraph 78, see figure 3A) except for within the signal such that the remote monitoring station monitors the one or more user channels. However Barrett teach a remote monitoring station (column 2, lines 32-40, column 4, lines 5-11, see figures 1, 3).Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to modify the apparatus of Sharon to include monitoring station for monitoring the copy as taught by Barrett in order to control signals thereby high quality output signal, as taught by Barrett in column 2, lines 45-50, see figure 2.

Regarding Claim 14, Barrett further teach the method of claim 1 wherein the satellite additionally transmits one or more additional signals in one or more respective additional beams (column3, lines 20-25), wherein the satellite is periodically reconfigured to select different ones

of said signal and said one or more additional signals for transmitting a copy thereof in said second beam(column 2, lines 32-55, see figures 1-3).

Regarding Claim 15, Barrett et al further teach the method of claim 14, wherein the satellite is periodically reconfigured so that each of the plurality of signals is monitored sequentially. (column 3, lines 23- 31, see figures 1, 2).

Regarding Claim 22, Jacomb-Hood teach The method of claims 16 to 21, further including receiving channel allocation data identifying an allocation of one or more user channels within the signal (paragraph 78, see figure 3A), and except for monitoring the one or more user channels. However Barrett teach a remote monitoring station (column 4, lines 5-11, see figures 1, 3).Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to modify the apparatus of Sharon to include monitoring station for monitoring the copy as taught by Barrett in order to control signals thereby high quality output signal, as taught by Barrett in column 2, lines 45-50, see figure 2.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacomb-Hood et al. (PGUB -No: 2003/0052819) and Kasser et al. (Patent No: 6078800) in view of Armbruster et al. (Patent -No: 5710971).

Regarding Claim 10, Armbruster et al. further teach the method of claim 1, wherein the satellite

is a repeater satellite configurable to convert a feeder link signal, transmitted from a terrestrial gateway to the satellite, to said signal and said copy of the signal (column 4, lines 9-15).

7. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacomb-Hood et al. (PGUB -No: 2003/0052819) and Kasser et al. (Patent No: 6078800) in view of Ceresoli et al. (PGUB -No: 2004/0127192).

Regarding claim 24, Ceresoli et al further teach a computer program arranged to perform the method of claim 1 (by teaching in paragraph 32).

Regarding claim 25, Ceresoli et al further teach a computer program product incorporating a computer program according to claim 24 (by teaching in paragraph 106).

Regarding claim 26, Ceresoli et al further teach apparatus arranged to perform the method of claim 1(by teaching in paragraph 108).

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Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure Chang et al (Patent No:7257418) teach Specific subscriber acquisition method involves scanning beam to each of cell clusters sequentially, until one of cell clusters including specific subscriber is identified.

Any response to this Office Action should be **faxed** to (571) 273-8300 or **mailed to:**

Commissioner for patents
P.O.Box1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window

Randolph Building

401 Dulany street

Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adel Y. Youssef whose telephone number is 571-270-3525. The examiner can normally be reached on Monday to Thursday 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDERSON MATTHEW can be reached on (571)272-4177.The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ADEL YOUSSEF/

Examiner, Art Unit 2618

/Matthew D. Anderson/

Supervisory Patent Examiner, Art Unit 2618